

§ 1054.705

40 CFR Ch. I (7–1–13 Edition)

and other production-line testing. However, if exhaust emissions from an engine exceed an exhaust FEL or standard (for example, during a selective enforcement audit), you may use emission credits to recertify the family with a higher FEL that applies only to future production.

(f) Emission credits may be used in the model year they are generated (averaging) and in future model years (banking). Emission credits may not be used for past model years.

(g) You may increase or decrease an exhaust FEL during the model year by amending your application for certification under §1054.225. See 40 CFR 1060.225 for provisions related to changing an FEL for fuel tank permeation.

(h) Engine and equipment manufacturers certifying with respect to evaporative emissions may use emission credits to demonstrate compliance under this subpart. Component manufacturers may establish FELs for their certified products, but they may not generate or use emission credits under this subpart.

(i) In your application for certification, base your showing of compliance on projected production volumes for engines or equipment intended for sale in the United States. As described in §1054.730, compliance with the requirements of this subpart is determined at the end of the model year based on actual production volumes for engines or equipment intended for sale in the United States. Do not include any of the following engines or equipment to calculate emission credits:

(1) Engines or equipment exempted under subpart G of this part or under 40 CFR part 1068.

(2) Engines or equipment intended for export.

(3) Engines or equipment that are subject to state emission standards for that model year. However, this restriction does not apply if we determine that the state standards and requirements are equivalent to those of this part and that products sold in such a state will not generate credits under the state program. For example, you may not include engines or equipment certified for California if California has more stringent emission standards for these products or if your products gen-

erate or use emission credits under the California program.

(4) Engines or equipment not subject to the requirements of this part, such as those excluded under §1054.5.

(5) Any other engines or equipment where we indicate elsewhere in this part 1054 that they are not to be included in the calculations of this subpart.

§ 1054.705 How do I generate and calculate exhaust emission credits?

The provisions of this section apply for calculating exhaust emission credits. You may generate exhaust emission credits only if you are a certifying engine manufacturer.

(a) For each participating family, calculate positive or negative emission credits relative to the otherwise applicable emission standard. Calculate positive emission credits for a family that has an FEL below the standard. Calculate negative emission credits for a family that has an FEL above the standard. Sum your positive and negative credits for the model year before rounding. Round the sum of emission credits to the nearest kilogram (kg) using consistent units throughout the following equation:

$$\text{Emission credits (kg)} = (\text{STD} - \text{FEL}) \times (\text{Volume}) \times (\text{Power}) \times (\text{UL}) \times (\text{LF}) \times (10^{-3})$$

Where:

STD = the emission standard, in g/kW-hr.

FEL = the family emission limit for the family, in g/kW-hr.

Volume = the number of engines eligible to participate in the averaging, banking, and trading program within the given family during the model year, as described in §1054.701(i).

Power = the maximum modal power of the emission-data engine as calculated from the applicable test procedure described in subpart F of this part, in kilowatts.

UL = the useful life for the given family, in hours.

LF = load factor. Use 0.47 for nonhandheld engines and 0.85 for handheld engines. We may specify a different load factor if we approve the use of special test procedures for a family under 40 CFR 1065.10(c)(2), consistent with good engineering judgment.

(b) [Reserved]